=> d his

L1

(FILE 'HOME' ENTERED AT 11:07:30 ON 12 JUN 2007)

FILE 'REGISTRY' ENTERED AT 11:08:06 ON 12 JUN 2007

STRUCTURE UPLOADED

L2 0 S L1

L3 54 S L1 SSS FUL

L4 54 S L3 AND CAPLUS/LC

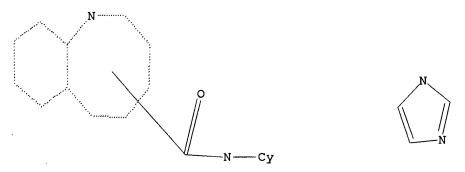
FILE 'CAPLUS' ENTERED AT 11:11:58 ON 12 JUN 2007

L5 16 S L4

=> d 11

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> d ibib abs hitstr total

PUBLISHER:

ANSWER 1 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:148015 CAPLUS

DOCUMENT NUMBER: 146:308460

TITLE: Isolation and characterization of human

immunodeficiency virus type 1 resistant to the

small-molecule CCR5 antagonist TAK-652

AUTHOR(S): Baba, Masanori; Miyake, Hiroshi; Wang, Xin; Okamoto,

Mika; Takashima, Katsunori

CORPORATE SOURCE: Division of Antiviral Chemotherapy, Center for Chronic

Viral Diseases, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, 890-8544,

Japan

SOURCE: Antimicrobial Agents and Chemotherapy ((2007),) 51(2),

707-715

CODEN: AMACCQ; ISSN: 0066-4804
American Society for Microbiology

DOCUMENT TYPE: Journal LANGUAGE: English

AB TAK-652, a novel small-mol. chemokine receptor antagonist, is a highly potent and selective inhibitor of CCR5-using (R5) human immunodeficiency virus type 1 (HIV-1) replication in vitro. Since TAK-652 is orally bioavailable and has favorable pharmacokinetic profiles in humans, it is considered a promising candidate for an entry inhibitor of HIV-1. To investigate the resistance to TAK-652, peripheral blood mononuclear cells were infected with the R5 HIV-1 primary isolate KK and passaged in the presence of escalating concns. of the compound for more than 1 yr. After 67 wk of cultivation, the escape virus emerged even in the presence of a high concentration of TAK-652. This virus displayed more than 200,000-fold resistance

to TAK-652 compared with the wild type. The escape virus appeared to have cross-resistance to the structurally related compound TAK-779 but retained full susceptibility to TAK-220, which is from a different class of CCR5 antagonists. Furthermore, the escape virus was unable to use CXCR4 as a coreceptor. Anal. for Env amino acid sequences of escape viruses at certain points of passage revealed that amino acid changes accumulated with an increasing number of passages. Several amino acid changes not only in the V3 region but also in other Env regions seemed to be required for R5 HIV-1 to acquire complete resistance to TAK-652.

IT 497223-28-6, TAK-652

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(human immunodeficiency virus type 1 resistant to the small-mol. CCR5 antagonist TAK-652)

RN 497223-28-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 497223-25-3 CMF C41 H52 N4 O4 S

PAGE 1-A

PAGE 1-B

CM 2

CRN 75-75-2 CMF C H4 O3 S

REFERENCE COUNT:

THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/506,955 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN L5 ACCESSION NUMBER: 2007:119657 CAPLUS DOCUMENT NUMBER: 146:182972 TITLE: Methods for reducing viral load in HIV-1-infected patients INVENTOR(S): Olson, William C.; Maddon, Paul J.; Pevear, Daniel C.; Israel, Robert J.; Murga, Jose D. Progenics Pharmaceuticals, Inc., USA PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 97pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

```
PATENT NO.
                           KIND
                                   DATE
                                                APPLICATION NO.
                                                                          DATE
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                           ____
                                   _____
                                                -----
                                                                          _____
                                   20070201
     WO 2007014114
                            A2
                                             WO 2006-US28565
                                                                          20060721
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
              GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
              KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN,
              MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU,
              SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG,
              US, UZ, VC, VN, ZA, ZM, ZW
          RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
              IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
              KG, KZ, MD, RU, TJ, TM
     US 2007026441
                            A1
                                   20070201
                                                US 2006-491330
                                                                          20060721
PRIORITY APPLN. INFO.:
                                                US 2005-702064P
                                                                      P 20050722
                                                US 2005-701889P
                                                                      P
                                                                          20050723
                                                US 2005-711528P
                                                                      Ρ
                                                                          20050826
                                                US 2005-715619P
                                                                      P 20050909
```

AB The authors disclose a method for reducing viral load in an HIV-1-infected human subject. The method comprises the administration at a predefined intervals of (a) a humanized antibody designated PRO 140, or of (b) an anti-CCR5 receptor monoclonal antibody. The authors also disclose a treatment comprising the administration of (a) a monoclonal antibody which (i) binds to a CCR5 receptor on the surface of the subject's CD4+ cells and (ii) inhibits fusion of HIV-1 to CCR5+CD4+ cells, and (b) a non-antibody CCR5 receptor antagonist, in therapeutic amts.

IT 497223-28-6, TAK-652

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (with anti-CCR5 antibody for combination therapy in human immunodeficiency virus infection)

RN 497223-28-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 497223-25-3 CMF C41 H52 N4 O4 S

PAGE 1-B

CM 2

CRN 75-75-2 CMF C H4 O3 S

ANSWER 3 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN L5

ACCESSION NUMBER:

2006:578211 CAPLUS

DOCUMENT NUMBER:

145:62897

TITLE:

Preparation of spirotropane compounds and therapeutic

use as modulators of chemokine receptor activity

INVENTOR(S):

Chan Chun Kong, Laval; Moinet, Christophe; Courchesne,

Marc; Vaillancourt, Louis; Blais, Charles; Bubenik,

Monica

PATENT ASSIGNEE(S):

Virochem Pharma Inc., Can. PCT Int. Appl., 145 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	KIN		DATE																
	WO 2006060919						20060615		WO 2005-CA1878										
	W: AE, AG,		AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	ĊA,	CH,			
							DE,												
							ID,												
		KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,		
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,		
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,		
		VN,	YU,	ZA,	ZM,	ZW									•				
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,		
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,		
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,		
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,		
		KG,	ΚZ,	MD,	RU,	ТJ,	TM												
PRIORITY APPLN. INFO.:										US 2	004-	6342	66P		P 2	0041	209		
•										US 2	005-	6930	51P		P 2	0050	623		
OTHER SOURCE(S):						PAT	145:	6289	7										

 R^1 \mathbb{R}^2 _R3 I Ph II

Page 6

AB Spiro compds. according to formula (I) are claimed: wherein R1 = NR7R9; R2 = (un)substituted C1-10 alkyl, C2-10 alkenyl, 3-10 membered heterocycle, etc.; R3 = H, (un)substituted C1-10 alkyl or C6-12 aryl; R7 = H, (un) substituted C1-10 alkyl, C2-10 alkenyl, C2-10 alkynyl; R9 = H or (un) substituted C1-10-alkyl; and ring A represents a 5 or 6 membered heteroring substituted once or twice with a keto substituent. These compds. and their pharmaceutical acceptable salts are used in combinations or in pharmaceutical compns. and are useful in the modulation of CCR5 chemokine receptor activity (no data given). I are useful in the prevention or treatment of certain inflammatory diseases, immunoregulatory diseases, organ transplantation reactions and in the prevention and treatment of infectious diseases such as HIV infections. Preparation of I is exemplified. For example, II was prepared from 4,4difluorocyclohexanecarboxylic acid ((S)-3-oxo-1-phenylpropyl)amide and 3-(4-methanesulfonylbenzyl)bicyclo[3.2.1]- 1α , 3, 8triazaspiro[4.5]dodecan-2,4-dione hydrochloride (preparation given). IT

497223-28-6, TAK-652

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(addnl. therapeutic agent; preparation of spirotropane compds. and therapeutic use as modulators of chemokine receptor activity)

RN497223-28-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM

CRN 497223-25-3 CMF C41 H52 N4 O4 S

CM :

CRN 75-75-2 CMF C H4 O3 S

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:558325 CAPLUS

DOCUMENT NUMBER: 145:62894

TITLE: Preparation of spirotropane compounds and methods for

the modulation of chemokine receptor activity to block

cellular entry of HIV

INVENTOR(S): Chan Chun Kong, Laval; Moinet, Christophe; Courchesne,

Marc; Vaillancourt, Louis; Bubenik, Monica

PATENT ASSIGNEE(S): Virochem Pharma Inc., Can.

SOURCE:

PCT Int. Appl., 153 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATEN	KIND DATE			i	APPL:	ICAT:		DATE									
WO 20	WO 2006060918						20060615			WO 2	005-	CA18	20051209				
. 1	W :	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	ΚP,	KR,
		ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
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		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	ŪG,	ZM,	ZW,	AM,	AZ,	BY,
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PRIORITY A	RIORITY APPLN. INFO.:								1	US 2	004-	6342	P 20041209				
OTHER SOURCE(S):					MARPAT 145:62894												

$$N \longrightarrow \mathbb{R}^{1}$$

$$Me - S = 0$$

$$\mathbb{R}^{2}$$

$$N \longrightarrow \mathbb{R}^{2}$$

$$N \longrightarrow \mathbb{R}^{$$

Compds. according to formula I (wherein the R1= (un)substituted alkyl, alkenyl, etc.; R2 = H, cycloalkylcarbonyl, ester, etc.; and A = a 5 or 6 membered heteroring involving a nitrogen or oxygen atom and one or two keto substituent) are claimed. These compds. and their pharmaceutical acceptable salt are used in combinations or pharmaceutical compns. and are useful in modulation of CCR5 chemokine receptor activity and blocking cellular entry of HIV (no biol. data given). Preparation of I is exemplified. For example, II was prepared from 3-(4-methanesulfonylbenzyl)bicyclo[3.2.1]-la,3,8-triazaspiro[4.5]dodecan-2,4-dione hydrochloride (preparation given) and (3R,4S)-3-formyl-4-phenylpyrrolidine-1-carboxylic acid tert-Bu ester (preparation given).

IT 497223-28-6, TAK-652

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(addnl. therapeutic agent; preparation of spirotropane compds. and methods for modulation of chemokine receptor activity to block cellular entry of HIV)

RN 497223-28-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 497223-25-3 CMF C41 H52 N4 O4 S

PAGE 1-A

PAGE 1-B

CM 2

CRN 75-75-2 CMF C H4 O3 S

REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/506,955 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:542810 CAPLUS 145:14785 DOCUMENT NUMBER: Solid preparation containing surface modifier TITLE: INVENTOR(S): Uchiyama, Yoshihiro; Yoshinari, Tomohiro; Fukuta,

Makoto

PATENT ASSIGNEE(S): Takeda Pharmaceutical Co., Ltd., Japan

PCT Int. Appl., 72 pp.

SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
    WO 2006059716
                               20060608
                                           WO 2005-JP22187
                          A1
                                                                   20051202
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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:
                                            JP 2004-350972
                                                                A 20041203
```

MARPAT 145:14785 OTHER SOURCE(S):

Disclosed is a medical drug, in particular, solid prepns. containing a AB medicinal ingredient with high tendency toward gelation, characterized by simultaneously containing a surface modifier and an acid or base. This characteristic realizes improvement to the disintegration easiness, production efficiency and stability of the solid prepns. containing the above medicinal ingredient. For example, tablets were prepared from (S)-8-[4-(2butoxyethoxy)phenyl]-1-isobutyl-N-[4-[[(1-propyl-1H-imidazol-5yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide monomethanesulfonate, mannitol, citric acid, silica (Aerosil) as a surface modifier, crystalline cellulose, hydroxypropyl cellulose, sodium croscarmellose, talc, and magnesium stearate. The tablet showed improved disintegration property and storage stability.

IT 497223-28-6

> RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(solid preparation containing active ingredients with high gelation tendency,

surface modifier, and acid or base)

RN497223-28-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM

497223-25-3 CRN

CMF C41 H52 N4 O4 S

Absolute stereochemistry. Rotation (-).

PAGE 1-A

PAGE 1-B

CM 2

CRN 75-75-2 CMF C H4 O3 S

REFERENCE COUNT:

39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/506,955

ANSWER 6 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:184008 CAPLUS

DOCUMENT NUMBER: 144:432675

TITLE: Highly Potent and Orally Active CCR5 Antagonists as

Anti-HIV-1 Agents: Synthesis and Biological Activities of 1-Benzazocine Derivatives Containing a Sulfoxide

Moiety

AUTHOR(S): Seto, Masaki; Aikawa, Katsuji; Miyamoto, Naoki;

Aramaki, Yoshio; Kanzaki, Naoyuki; Takashima,

Katsunori; Kuze, Yoji; Iizawa, Yuji; Baba, Masanori;

Shiraishi, Mitsuru

CORPORATE SOURCE: Pharmaceutical Research Division, Takeda

Pharmaceutical Company Limited, 2-17-85 Jusohonmachi,

Yodogawa-ku, Osaka, 532-8686, Japan

SOURCE: Journal of Medicinal Chemistry (2006) 49(6

2037-2048

CODEN: JMCMAR; ISSN: 0022-262

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 144:432675

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Chemical modification was performed on the orally bioavailable and potent CCR5 antagonist sulfoxide compound I, mainly focusing on replacement of the [6,7]-fused 1-benzazepine nucleus. Ring-expanded [6,8]-, [6,9]-, and [6,10]-fused compds. containing S-sulfoxide moieties were prepared and evaluated

for biol. activities which led to 1-benzazocine and 1-benzazonine compds. that exhibited potent inhibitory activities. 1-Benzazocine compds. possessing the S-sulfoxide moiety showed greater potency than I in a fusion assay. Further investigation in a multi-round infection assay showed that the 1-isobutyl-1-benzazocine compound II, containing the S-[[(1-propyl-1H-imidazol)-5-yl]methyl]sulfinyl group, showed the most potent anti-HIV-1 activity. II (TAK-652) also inhibited the replication of six macrophage-tropic HIV-1 clin. isolates in peripheral blood mononuclear cells. It was also absorbed after oral administration in rats, dogs, and monkeys and was thus selected as a clin. candidate. The synthesis and biol. activity of II and derivs. are described.

IT 497223-28-6P 497223-60-6P 497250-39-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of CC chemokine receptor 5 antagonistic chiral sulfoxide-containing

benzazocines as anti-HIV-1 agents)

RN 497223-28-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 497223-25-3

CMF C41 H52 N4 O4 S

Absolute stereochemistry. Rotation (-).

PAGE 1-A

PAGE 1-B

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 497223-60-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-[(1-methyl-1H-pyrazol-4-yl)methyl]-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

RN 497250-39-2 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-propyl-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

REFERENCE COUNT:

33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/506,955

ANSWER 7 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

A&CESSION NUMBER: 2006:156018 CAPLUS

DOCUMENT NUMBER: 145:137304

TITLE: TAK-652, a novel CCR5 inhibitor, has favourable drug

interactions with other antiretrovirals in vitro

AUTHOR(S): Tremblay, Cecile L.; Giquel, Francoise; Chou,

Ting-Chao; Dong, Huajin; Takashima, Katsunori; Hirsch,

Martin S.

CORPORATE SOURCE: Massachusetts General Hospital, Infectious Diseases

Unit, Harvard Medical School, Cambridge, MA, USA

Antiviral Therapy (2005) 10(8), 967-968 SOURCE:

CODEN: ANTHFA; ISSN:=1359-6535

PUBLISHER: International Medical Press

DOCUMENT TYPE: Journal LANGUAGE: English

TAK-652 is a newly developed small mol., orally bioavailable CCR5 antagonist with potent in vitro anti-HIV-1 activity. Evaluation of its combination with various other antiretroviral compds., such as reverse transcriptase inhibitors, protease inhibitors, and fusion inhibitors, showed favorable and strong synergy against the multidrug-resistant isolate. Combination indexes demonstrate interactions ranging from low level antagonism at low inhibitory concns. to synergy at IC95.

IT497223-28-6, TAK-652

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(TAK-652 combination with antiretroviral agents showed favorable synergistic drug interactions in human immunodeficiency virus-1 infected cells of patient)

RN 497223-28-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 497223-25-3 C41 H52 N4 O4 S

Absolute stereochemistry. Rotation (-).

PAGE 1-A

PAGE 1-B

CM 2

CRN 75-75-2 CMF C H4 O3 S

REFERENCE COUNT:

7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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10/506,955
     ANSWER 8 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN
 CCESSION NUMBER:
                          2005:1290185 CAPLUS
DOCUMENT NUMBER:
                          144:27595
TITLE:
                          Crystal of pharmaceutical compound containing
                          1-benzazocine-5-carboxamide derivative, and
                          preparation thereof
INVENTOR(S):
                          Sugimoto, Ikutaro; Iwano, Norio
PATENT ASSIGNEE(S):
                          Takeda Pharmaceutical Company Limited, Japan
SOURCE:
                          PCT Int. Appl., 20 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                          KIND
                                 DATE
                                              APPLICATION NO.
                                                                      DATE
     _____
                                              ______
     WO 2005116013
                                 20051208
                                              WO 2005-JP9751
                           A1
                                                                      20050527
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                              JP 2004-158842
     Disclosed is a crystal of (S)-8-[4-(2-butoxyethoxy)phenyl]-1-isobutyl-N-(4-
     {[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl}phenyl)-1,2,3,4-tetrahydro-1-
     benzazocine-5-carboxamide (I). A method of preparation of the crystal of I, and method for preparation of I methanesulfonate are also disclosed. Thus,
     crystal of I was prepared from 8-[4-(2-butoxyethoxy)phenyl]-1-isobutyl-
     1,2,3,4-tetrahydro-1-benzoazocine-5-carboxylic acid and
     4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenylamine for making a
     tablet.
     497223-25-3P 497223-28-6P
IT
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RL: PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(crystal of 1-benzazocine-5-carboxamide derivative, and preparation thereof)

RN 497223-25-3 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 497223-28-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 497223-25-3 CMF C41 H52 N4 O4 S

CM 2

CRN 75-75-2 CMF C H4 O3 S

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

5/ ANSWER 9 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ASCESSION NUMBER: 2005:1256967 CAPLUS

DOCUMENT NUMBER: 144:368023

TITLE: CCR5: a target for therapeutic intervention of HIV-1

infection

AUTHOR(S): Mitsuya, Hiroaki

CORPORATE SOURCE: Dep. of Infectious Diseases, Dep. of Hematology,

School of Medicine, Kumamoto University, Japan

SOURCE: Jikken Igaku (2005) 23(17), 2726-2731

CODEN: JIIGHT: ISSN: 0288-5514

PUBLISHER: Yodosha

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

AB A review on human immunodeficiency virus-1 (HIV-1) invasion inhibitors and chemokine receptor antagonists, discussing (1) gp41 targeted inhibitors T-20 and T-1249 and CD4 binding inhibitors PRO542 and TNX-355 and anti-CXCR4 agents, (2) CCR5 antagonists maraviroc, aplaviroc, vicraviroc and TAK-652 and (3) structural anal. of CCR5 and CCR5 antagonist binding.

IT 497223-28-6, TAK 652

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(CCR5 as a target for therapeutic intervention of HIV-1 infection)

RN 497223-28-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 497223-25-3 CMF C41 H52 N4 O4 S

CM 2

CRN 75-75-2 CMF C H4 O3 S

10//506,955

PUBLISHER:

ANSWER 10 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1201922 CAPLUS

DOCUMENT NUMBER: 144:16502

TITLE: TAK-652 inhibits CCR5-mediated human immunodeficiency

virus type 1 infection in vitro and has favorable

pharmacokinetics in humans

AUTHOR(S): Baba, Masanori; Takashima, Katsunori; Miyake, Hiroshi;

Kanzaki, Naoyuki; Teshima, Koichiro; Wang, Xin;

Shiraishi, Mitsuru; Iizawa, Yuji

CORPORATE SOURCE: Division of Antiviral Chemotherapy, Center for Chronic

Viral Diseases, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, 890-8544,

Japan

SOURCE: Antimicrobial Agents and Chemotherapy (2005)

4584-4591

CODEN: AMACCQ; ISSN: 0066-4804 American Society for Microbiology

DOCUMENT TYPE: Journal LANGUAGE: English

AB The first small-mol. CCR5 antagonist, TAK-779, could not be developed as an anti-human immunodeficiency virus type (anti-HIV-1) agent because of its poor oral bioavailability. TAK-652 is an orally bioavailable TAK-779 derivative with potent anti-HIV-1 activity. TAK-652 inhibited the binding of RANTES (regulated on activation, normal T-cell expressed and secreted), macrophage inflammatory protein 1α (MIP-1α), and MIP-1β to CCR5-expressing cells at nanomolar concns. TAK-652 could also suppress the binding of monocyte chemotactic protein 1 (MCP-1) to CCR2b-expressing cells. However, its inhibitory effect on ligand binding to other chemokine receptors was limited. TAK-652 was active against CCR5-using (R5) HIV-1 but totally inactive against CXCR4-using (X4) HIV-1. The compound was active against R5 HIV-1 clin. isolates containing reverse transcriptase and protease inhibitor-resistant mutations, with a mean 50% effective concentration (EC50) and EC90 of 0.061 and 0.25 nM, resp. In addition,

recombinant R5 viruses carrying different subtype (A to G) envelope proteins were equally susceptible to TAK-652. A single oral administration of TAK-652 up to 100 mg was safe and well tolerated in humans. The compound displayed favorable pharmacokinetics, and its plasma concentration was 7.2~ng/mL (9.1~nM) even 24 h after the administration of 25

mg.

Thus, TAK-652 is a promising candidate as a novel entry inhibitor of HIV-1.

IT 497223-28-6, TAK 652

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(TAK-652 inhibits CCR5-mediated HIV-1 infection in vitro and has favorable pharmacokinetics in humans)

RN 497223-28-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 497223-25-3 CMF C41 H52 N4 O4 S Absolute stereochemistry. Rotation (-).

PAGE 1-A

PAGE 1-B

CM 2

CRN 75-75-2 CMF C H4 O3 S

REFERENCE COUNT:

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

dispersion, and heating the mixture to give a transparent liquid composition Further, the obtained composition is encapsulated to give a capsule preparation

hydrogenated castor oil 102, polyethylene glycol glyceryl caprylate/caprate 102, medium-chain fatty acid triglyceride 51, and water 15 mg was formulated, and filled in a gelatin soft capsule.

ΙT 497223-28-6, (S)-(-)-8-[4-(2-Butoxyethoxy)phenyl]-1-isobutyl-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1benzazocine-5-carboxamide methanesulfonate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. containing elevated content of drugs)

RN497223-28-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 497223-25-3 CMF C41 H52 N4 O4 S

Absolute stereochemistry. Rotation (-).

PAGE 1-A

PAGE 1-B

CM 2

CRN 75-75-2 CMF C H4 O3 S

REFERENCE COUNT:

25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 12 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN CESSION NUMBER: 2005:1042031 CAPLUS DOCUMENT NUMBER: 143:312057 TITLE: Emulsions containing hardly water-soluble drugs for oral administration INVENTOR(S): Yoshinari, Tomohiro Takeda Pharmaceutical Company Limited, Japan PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 76 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE-APPLICATION NO. DATE ______ 20050929 / WO 2005089714 WO 2005-JP5238 **A**1 20050323 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20050929 CA 2562388 **A**1 CA 2005-2562388 EP 1728504 EP 2005-727183 **A**1 20061206 20050323 AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR PRIORITY APPLN. INFO.: JP 2004-87023 A 20040324 WO 2005-JP5238 W 20050323 OTHER SOURCE(S): MARPAT 143:312057 It is intended to provide a medicinal composition having a high biol. availability and a process for producing the same which comprises dispersing a drug component in two or more surfactants (for example, surfactants belonging to the same series such as a long-chain fatty acid glyceride having a long-chain polyoxyethylene in its hydrophilic group with a medium-chain fatty acid glyceride having a short-chain polyoxyethylene in its hydrophilic group), adding a small amount of water thereto to give a semisolid or liquid medicinal composition in the form of a microemulsion, and producing an oral preparation such as capsules by using the same so as to form and sustain a stable microemulsion containing the drug component (in particular, a hardly water-soluble drug component) in the digestive tract. For example, (S)-(-)-8-[4-(2-butoxyethoxy)phenyl]-1isobutyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-isobutyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-isobutyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-isobutyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-isobutyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-isobutyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-isobutyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-isobutyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-isobutyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-isobutyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-5-yl)methyl-5-yl]sulfinyl-N-[4-[(1-propyl-5-yl)methyl-5-yl]sulfinyl-N-[4-[(1-propyl-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-5-yl)methyl-1]sulfinyl-N-[4-[(1-propyl-5-yl)methyl-1]sulfinyl-Ntetrahydro-1-benzazocine-5-carboxamide methanesulfonic acid salt 1 q, ethoxylated hydrogenated castor oil 3.4 g, ethoxylated caprylic/capric glyceride 3.4g, and medium-chain triglyceride 1.6 g were mixed and heated at 60° to give a dispersion. Distilled water 0.5 g was added to the dispersion to give a clear composition, which was filled into capsules. IT 497223-28-6 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (microemulsions containing hardly water-soluble drugs and surfactants) 497223-28-6 CAPLUS RN · CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 497223-25-3 CMF C41 H52 N4 O4 S

Absolute stereochemistry. Rotation (-).

PAGE 1-A

PAGE 1-B

CM 2

CRN 75-75-2 CMF C H4 O3 S

REFERENCE COUNT:

33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/506,955

ANSWER 13 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1016895 CAPLUS

DOCUMENT NUMBER: 143:415586

TITLE: G-Protein-Coupled Receptor Affinity Prediction Based

on the Use of a Profiling Dataset: QSAR Design,

Synthesis, and Experimental Validation

AUTHOR(S): Rolland, Catherine; Gozalbes, Rafael; Nicolaie, Eric;

Paugam, Marie-France; Coussy, Laurent; Barbosa, Frederique; Horvath, Dragos; Revah, Frederic

Frederique; Horvath, Dragos; Revah, Frederi

CORPORATE SOURCE: Cerep, Rueil-Malmaison, 92500, Fra

SOURCE: Journal of Medicinal Chemistry (2005) 48(21),

6563-6574

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB A QSAR model accounting for "average" G-protein-coupled receptor (GPCR) binding was built from a large set of exptl. standardized binding data (1939 compds. systematically tested over 40 different GPCRs) and applied to the design of a library of "GPCR-predicted" compds. Three hundred and sixty of these compds. were randomly selected and tested in 21 GPCR binding assays. Positives were defined by their ability to inhibit by more than 70% the binding of reference compds. at 10 µM. A 5.5-fold enrichment in positives was observed when comparing the "GPCR-predicted" compds. with 600 randomly selected compds. predicted as "non-GPCR" from a general collection. The model was efficient in predicting strongest binders, since enrichment was greater for higher cutoffs. Significant enrichment was also observed for peptidic GPCRs and receptors not included to develop the QSAR model, suggesting the usefulness of the model to design ligands binding with newly identified GPCRs, including orphan ones.

IT 868056-98-8

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(QSAR design, synthesis, and exptl. validation of G-protein-coupled receptor affinity prediction based on use of a profiling dataset)

RN 868056-98-8 CAPLUS

CN 1-Benzazocine-5-carboxamide, 1,2,3,4-tetrahydro-1-(2-methylpropyl)-8-[4-(2-propoxyethoxy)phenyl]-N-[4-[(1-propyl-1H-imidazol-5-yl)acetyl]phenyl](9CI) (CA INDEX NAME)

PAGE 1-A

$$N = N$$
 $N = N$
 $N = N$
 CH_2
 $C = O$
 NH
 $C = O$
 NH
 $C = O$

PAGE 2-A

i-Bu

REFERENCE COUNT:

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:675747 CAPLUS

DOCUMENT NUMBER: 141:207075

TITLE: Preparation of tricyclic compounds as CCR antagonists

for treatment of HIV infection

INVENTOR(S):
Shiraishi, Mitsuru; Seto, Masaki; Aikawa, Katsuji;

Kanzaki, Naoyuki; Baba, Masanori

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 161 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

						KIND DATE					APPL:									
		WO 2004069834					A1 20040819													
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,		
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI		
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,		
			BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,		
			MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,		
			GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG										
	JP 2004256531									JP 2004-29688										
	ΕP	P 1593681				A1 20051109					EP 2	004-	7084	20040205						
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
									MK,											
	US 2006178359						A1 20060810				US 2	005-	5444'	20050901						
PRIORITY APPLN. INFO.:										JP 2	003-	3111	2	7	A 2	00302	207			
•										1	WO 2	004-	JP11:	97	Ţ	V 2	00402	205		
OTHER SOURCE(S):						MAR:	PAT	141:	2070	7:5										

GI

AB The title compds. with general formula of R1-W-CO-NH-Z1-Z2-R2 [wherein R1 = (un)substituted cyclyl; Z1 = (un)substituted aryl; Z2 = (un)substituted

imino, alkylene, etc.; W = (un)substituted tricyclyl; R2 = (un)substituted amino, heterocyclyl, etc.] or salts or prodrugs thereof are prepared as chemokine receptors (CCR) antagonists. For example, the compound I was prepared in a multi-step synthesis. I inhibited 100% human CCR5 at 1 μM in 40 min. The compds. are useful as a preventive/therapeutic agent for HIV infection in human peripheral blood mononuclear cells, especially for AIDS (no data). Formulations containing the title compound as an active ingredient were also described.

IT 741268-80-4P 741268-88-2P

RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(drug candidate; preparation of tricyclic compds. as CCR antagonists for treatment of HIV infection)

RN 741268-80-4 CAPLUS

CN Pyrrolo[1,2-a][1]benzazocine-6-carboxamide, 9-[4-(2-butoxyethoxy)phenyl]-1,2,3,3a,4,5-hexahydro-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 741268-88-2 CAPLUS CN 1H-Pyrido[1,2-a][1]benzazocine-7-carboxamide, 10-[4-(2butoxyethoxy)phenyl]-2,3,4,4a,5,6-hexahydro-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

TT 741268-83-7P 741268-87-1P 741268-89-3P 741268-90-6P

RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of tricyclic compds. as CCR antagonists for treatment of HIV infection)

RN 741268-83-7 CAPLUS

CN Pyrrolo[1,2-a][1]benzazocine-6-carboxamide, 9-[4-(2-butoxyethoxy)phenyl]-1,2,3,3a,4,5-hexahydro-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, (3aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A

PAGE 1-B

RN 741268-87-1 CAPLUS

CN Pyrrolo[1,2-a][1]benzazocine-6-carboxamide, 9-[4-(2-butoxyethoxy)phenyl]-1,2,3,3a,4,5-hexahydro-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, (3aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A

$$n-BuO$$

PAGE 1-B

Page 36

RN 741268-89-3 CAPLUS

CN 1H-Pyrido[1,2-a][1]benzazocine-7-carboxamide, 10-[4-(2-butoxyethoxy)phenyl]-2,3,4,4a,5,6-hexahydro-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, (4aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 741268-90-6 CAPLUS

CN 1H-Pyrido[1,2-a][1]benzazocine-7-carboxamide, 10-[4-(2-butoxyethoxy)phenyl]-2,3,4,4a,5,6-hexahydro-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, (4aR)- (9CI) (CA INDEX NAME)

10/506,955

TT 741268-93-9P 741268-94-0P 741268-95-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of tricyclic compds. as CCR antagonists for treatment of HIV infection)

RN 741268-93-9 CAPLUS

CN 4H-Pyrrolo[3,2,1-kl][1]benzazocine-7-carboxamide, 10-[4-(2-butoxyethoxy)phenyl]-1,2,5,6-tetrahydro-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A

PAGE 1-B

--- OBu-n

RN 741268-94-0 CAPLUS

CN 1H,5H-Pyrido[3,2,1-kl][1]benzazocine-8-carboxamide, 11-[4-(2-butoxyethoxy)phenyl]-2,3,6,7-tetrahydro-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

RN 741268-95-1 CAPLUS

CN 5H-1,4-Oxazino[2,3,4-kl][1]benzazocine-8-carboxamide, 11-[4-(2-butoxyethoxy)phenyl]-2,3,6,7-tetrahydro-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

20

PAGE 1-B

REFERENCE COUNT:

THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 15 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:737732 CAPLUS

DOCUMENT NUMBER: 139:246034

Process for producing optically active imidazolylalkyl TITLE:

acylaminophenyl sulfoxide derivative

INVENTOR(S): Tawada, Hiroyuki; Ikemoto, Tomomi; Nishiguchi, Atsuko;

Ito, Tatsuya; Adachi, Mari

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

PCT Int. Appl., 103 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT 1	NO.			KIND DATE			APPLICATION NO.						DATE					
WO 2003076411					A1 20		2003	0030918		 WO 2	003-	JP28		2	20030311				
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,		
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,		
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	KZ,	LC,	LK,	LR,	LS,		
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NZ,	OM,	PH,	PL,		
		PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,		
			•	•			ΥU,												
	RW:										TZ,								
											CH,								
											NL,						BF,		
		ВJ,	CF,	CG,	CI,						ML,				TD,	TG			
	2479				A1						003-			20030311					
	2003					20030922				_									
						20040422													
EP	1484322				A1				EP 2003-708541										
	R:				•		•	•	•	•	IT,	•	•	•	•	•	PT,		
			•		•	•	•	•	•	•	TR,	•	•	•	•				
US 2005107606																			
CN 1649847							2005												
IN 2004KN01279														20040901					
					Α	20070405			JP 2006-355701						20061228				
RIT	Y APP							002-		-			0020						
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									,	WO 2	003-	JP28	40	1	W 2	0030	311		
CR SC	OURCE		MAR	PAT	139:	2460:	34												

OTHER SOURCE(S):

MARPAT 139:246034

GI

AB Disclosed is a process for producing an optically active imidazolylalkyl acylaminophenyl sulfoxide derivative (I) [wherein R1 = (un)substituted aliphatic

hydrocarbon or aromatic group; R2 = halo, NO2, cyano, each (un) substituted alkyl, cycloalkyl, HO, NH2, acyl, or aromatic group, CO2H or its ester, (un) substituted SH, sulfinyl, or sulfonyl; the ring A = benzene ring optionally substituted by halo, C1-4 alkyl, C1-4-haloalkyl, C1-4 alkoxy, C1-4 haloalkoxy; n = an integer of 0-3; p = an integer of 0-2; * denotes an asym. center; R3 = 5 or 6-membered ring; R4 = H, halo each (un) substituted lower alkyl or lower alkoxy; R5 = H, each (un) substituted hydrocarbon, aromatic group, sulfonyl, or acyl, CO2H or its ester or amide; X = a bond, a divalent group consisting of 1-4 atoms in the straight chain portion] or a salt thereof, which comprises reacting an imidazolylalkyl aminophenyl sulfoxide derivative (II; R1, R2, the ring A, n, p, * = same as above) with a benzoazacycloalkenecarboxylic acid derivative (III; R3-R5, m, X = same as above) or its salt or reactive derivative This process does not cause side reactions such as racemization and Pummerer rearrangement and is industrially advantageous for the preparation of the title compds. which have CCR5 antagonistic activity (no data). Thus, 27.9 mL Et3N was added dropwise to a solution of 12.5 g 4-aminobenzenethiol in 180 mL THF, followed by adding dropwise 28.2 mL trifluoroacetic anhydride at $0-10^{\circ}$, and the resulting mixture was stirred at 0-5° for 0.5, treated with 30 mL tap water, and stirred at room temperature for 0.5 h to give, after workup and crystallization from n-hexane, 26.1 g 2,2,2-trifluoro-N-(4mercaptophenyl)acetamide (IV). Et3N (29.0 mL) was added to a solution of 24.8 g IV in 99 mL MeOH, followed by adding a solution of 20.4 g 5-(chloromethyl)-1-propyl-1H-imidazole hydrochloride in 21 mL H2O at 0-20°, and the resulting mixture was stirred at 20-30° for 0.5 h to give after workup and crystallization from iso-Pr ether, 73%

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2,2,2-trifluoro-N-[4-[[(1-propyl-1H-imidazol-5-
    yl)methyl]thio]phenyl]acetamide (V). 30% Aqueous H2O2 (16.4 g) was added to a
     solution of 33.1 g V in 49.7 mL at 2-30^{\circ}, stirred at the same temperature
     for 3 h and treated with 330 mL EtOAc, followed by adding 35.9 g Na2S2O3.5
    \rm H2O at 0-10^{\circ} and then dropwise 144.6 mL 6 N aqueous NaOH, and the
     resulting mixture was stirred at the same temperature for 0.5 h to give, after
     workup, 2,2,2-trifluoro-N-[4-[[(1-propyl-1H-imidazol-5-
     yl)methyl]sulfinyl]phenyl]acetamide which was dissolved in 198.6 mL MeOH,
     treated with a solution of 40.0 g K2CO3 in 99.3 mL H2O and stirred at
     50° for 2.5 h to give, after workup including decolorization with
     activated charcoal and crystallization from EtOAc, 73%
4-[[(1-propyl-1H-imidazol-5-
     yl)methyl]sulfinyl]phenylamine (VI). H2O (90 mL) was added dropwsie to a
     solution of 15.1 g di-p-toluoyl-D-tartaric acid (VII) and 10.3 g VI in
     1,2-dimethoxyethane and stirred at room temperature overnight, followed by
     filtration of the precipitated crystals, washing with 50% by volume aqueous
     1,2-dimethoxyethane (30 mL), vacuum-drying, recrystn. from aqueous MeCN, and
     vacuum-drying to give, 41.6% (-)-VI.VII diastereomer salt (99.6% de).
     (-)-VI.VII diastereomer salt (5 g) was extracted with 3 N aqueous HCl and 20 mL
     EtOAc and the aqueous layer was treated with 5 mL EtOAc 6 N aqueous NaOH to
    pH at .apprx.9, seeded with crystals, stirred at room temperature, and filtered
     to give 95.4% (-)-VI (1.88 g) as a white powder. A solution of 2.56 g
     7-[4-(2-butoxyethoxy)phenyl]-1-isobutyl-2,3-dihydro-1H-1-benzazepine-4-
     carboxylic acid in 7.5\ \text{mL} THF was treated with one drop of DMF and then
     dropwise with 0.56 mL oxalyl chloride at room temperature, and stirred for 1 h
     to give a solution of the acid chloride which was added dropwsie to a solution
     of (-)-VI, similarly prepared from 5 g (-)-VI.VII diastereomer salt, in 17.5
    \mbox{mL} THF and 2.85 \mbox{mL} Et3N at room temperature and stirred at room temperature
for 1 h to
     give, after workup including treatment with silica gel and activated
     charcoal, and crystallization from ethanol-tert-Bu Me ether, 78%
     (-) -7-[4-(2-butoxyethoxy)phenyl]-1-isobutyl-N-[4-[((1-propyl-1H-imidazol-5-
     yl)methyl]sulfinyl]phenyl]-2,3-dihydro-1H-1-benzazepine-4-carboxamide.
IT
     497223-25-3P 497223-28-6P 497250-40-5P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of optically active imidazolylalkyl acylaminophenyl sulfoxide
        derivs. by amidation of optically active imidazolylalkyl aminophenyl
        sulfoxides with benzoazacycloalkenecarboxylic acids as CCR5
        antagonists)
RN
     497223-25-3 CAPLUS
CN
     1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-
     tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-
     yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)
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PAGE 1-B

RN 497223-28-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 497223-25-3 CMF C41 H52 N4 O4 S

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 497250-40-5 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-propyl-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 497250-39-2 CMF C40 H50 N4 O4 S

PAGE 1-B

CM 2

CRN 75-75-2 CMF C H4 O3 S

REFERENCE COUNT:

12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 16 OF 16 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:133258 CAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

138:170089

TITLE:

Preparation of 1-benzazocine-5-carboxamides and related bicyclic compounds as CCR-5 antagonists for

use against HIV infectious and other diseases

Shiraishi, Mitsuru; Baba, Masanori; Aikawa, Katsuji; Kanzaki, Naoyuki; Seto, Masaki; Iizawa, Yuji

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 318 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	rent 1	NO.			KIND DATE					APP1	LICAT	DATE							
	VO 2003014105 VO 2003014105					A1 (20030220 A9 20031120				WO 2002-JP8043						20020807			
	W:										, BG,								
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		•	•	•	•	•	•	•	•		, MX,	•	•	•	•	•	•		
			•	•	•	•		•	•		, TJ,	TM,	TN,	TR,	TT,	TZ,	UA,		
		UG,	US,	UZ,	VC,	VN,	ΥU,	ZA,	ZM,	ZW									
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,		
		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	ΒE,	BG,	, CH,	CY,	CZ,	DE,	DK,	EE,	ES,		
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL	, PT,	SE,	SK,	TR,	BF,	ВJ,	CF,		
		CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR	, NE,	SN,	TD,	ΤG					
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AU	AU 2002328092					A1 20030224					2002-	3280	20020807						
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EP	EP 1423376					A1 20040602					2002-	7627	20020807						
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,		
											TR,			-	•	•			
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JР	JP 2007084578						2007	0405		JP :	2006-	3557	20061228						
PRIORIT	RIORITY APPLN. INFO.:									JP 2	2001-	2407	50		A 2	0010	808		
										JP :	2002-	6680	9		A 2	0020	312		
											2002-					0020			
											2002-					0020			
OTHER S	HER SOURCE(S):					MARPAT 138:17008										0020			

OTHER SOURCE(S):

GΙ

AB The present invention provides 1-benzazocine-5-carboxamides and related bicyclic compds. (shown as I or a salt thereof; variables defined below; e.g. 8-[4-(2-butoxyethoxy)phenyl]-1-isobutyl-N-[4-[[N-methyl-N-(tetrahydropyran-4-yl)amino]methyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide (shown as II)) having a CCR antagonist activity, especially a CCR5 antagonist activity, and the use thereof. For I: R1 is a 5-to 6-membered ring group which may be substituted; X1 is a bond or bivalent chain; ring A is a 5- to 6-membered ring group which may be substituted; ring B is a 8- to 10-membered ring group which may be substituted; X2 is a bivalent chain; Z1 is a bond or bivalent cyclic ring group; Z2 is a bond or a bivalent group; and R2 is an amino group, a N-containing heterocyclic group, etc. Fifty examples of preparation of I and

examples of preparation of intermediates are included. For example, $8-[4-(2-butoxyethoxy)phenyl]-N-[4-[[N-methyl-N-(tetrahydropyran-4-yl)amino]methyl]phenyl]-3,4-dihydro-2H-1-benzoxocin-5-carboxamide (66 mg) was prepared by 1st adding DMF, then thionyl chloride to <math>8-[4-(2-butoxyethoxy)phenyl]-3,4-dihydro-2H-1-benzoxocin-5-carboxylic acid (80 mg); this mixture was added to <math>4-[[N-methyl-N-(tetrahydropyran-4-yl)amino]methyl]aniline (57 mg) and triethylamine in THF. CCR-5 binding inhibitory ratios (%) are tabulated for 28 examples of I at 1 <math>\mu$ M. Six examples of pharmaceutical compns. are included.

497223-17-3P, 8-[4-(2-Butoxyethoxy)phenyl]-1-propyl-N-[4-[[(1-propylimidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide 497223-21-9P, 8-[4-(2-Butoxyethoxy)phenyl]-1-isobutyl-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide 497223-31-1P, 8-[4-(2-Butoxyethoxy)phenyl]-1-isobutyl-N-[4-[[(1-propylimidazol-2-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide 497223-35-5P, 8-[4-(2-Butoxyethoxy)phenyl]-1-propyl-N-[4-[[(1-propylimidazol-2-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide 497223-56-0P, 8-[4-(2-Butoxyethoxy)phenyl]-1-(2-methyl-3-hydroxypropyl)-N-[4-[[(1-propylimidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU

63

IT

(Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(drug candidate, chromatog. resolution; preparation of benzazocinecarboxamides

and related bicyclic compds. as CCR-5 antagonists for use against HIV infectious and other diseases)

RN 497223-17-3 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-propyl-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

$$N = N$$
 $N = N$
 $N =$

PAGE 2-A

n-Pr

RN 497223-21-9 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

$$N = N$$
 $N = N$
 $N =$

PAGE 2-A

i-Bu

RN 497223-31-1 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[[(1-propyl-1H-imidazol-2-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

$$n-Pr$$
 N
 CH_2
 $S=0$
 NH
 $C=0$

PAGE 2-A / i-Bu

RN 497223-35-5 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-propyl-N-[4-[[(1-propyl-1H-imidazol-2-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

$$n-Pr$$
 N
 CH_2
 $S=0$
 NH
 $C=0$

PAGE 2-A

n-Pr

RN 497223-56-0 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(3-hydroxy-2-methylpropyl)-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

$$N = N$$
 $N = N$
 $N =$

PAGE 2-A

$$\begin{array}{c} \text{HO-CH}_2\text{-CH-CH}_2 \\ \mid \\ \text{Me} \end{array}$$

IT 497223-25-3P, (-)-8-[4-(2-Butoxyethoxy)phenyl]-1-isobutyl-N-[4 [[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1 benzazocine-5-carboxamide 497250-39-2P, (-)-8-[4-(2 Butoxyethoxy)phenyl]-1-propyl-N-[4-[[(1-propylimidazol-5 yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide
 RL: PAC (Pharmacological activity); PUR (Purification or recovery); RCT
 (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES
 (Uses)
 (drug candidate; preparation of benzazocinecarboxamides and related bicyclic compds. as CCR-5 antagonists for use against HIV infectious and other diseases)

RN 497223-25-3 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

RN 497250-39-2 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-propyl-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

IT 497223-24-2P, (+)-8-[4-(2-Butoxyethoxy)phenyl]-1-propyl-N-[4-[[(1-Putoxyethoxy)phenyl]]-1-propyl-N-[4-[[(1-Putoxyethpropylimidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1benzazocine-5-carboxamide 497223-26-4P, (+)-8-[4-(2-4)]Butoxyethoxy)phenyl]-1-isobutyl-N-[4-[[(1-propyl-1H-imidazol-5yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide 497223-32-2P, (+) -8-[4-(2-Butoxyethoxy)phenyl]-1-isobutyl-N-[4-[[(1-propylimidazol-2-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1benzazocine-5-carboxamide 497223-33-3P, (-)-8-[4-(2- ${\tt Butoxyethoxy)} \, {\tt phenyl} \, {\tt l-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[(l-propylimidazol-2-l-isobutyl-N-[4-[[[l-propylimidazol-2-l-isobutyl-N-[4-[[l-isobutyl-1-[isobutyl-N-[4-[isobutyl-N-[4-[isobutyl-1-[isobutyl-N-[4-[iso$ yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (drug candidate; preparation of benzazocinecarboxamides and related bicyclic compds. as CCR-5 antagonists for use against HIV infectious and other diseases) RN497223-24-2 CAPLUS CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4tetrahydro-1-propyl-N-[4-[[(1-propyl-1H-imidazol-5-

Rotation (+).

yl)methyl]sulfinyl]phenyl]-, (+)- (9CI) (CA INDEX NAME)

PAGE 1-B

RN 497223-26-4 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

PAGE 1-B

RN 497223-32-2 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[[(1-propyl-1H-imidazol-2-yl)methyl]sulfinyl]phenyl]-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

PAGE 1-B

RN 497223-33-3 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[[(1-propyl-1H-imidazol-2-yl)methyl]sulfinyl]phenyl]-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

IT 497223-16-2P, 8-[4-(2-Butoxyethoxy)phenyl]-1-propyl-N-[4-[(1propylimidazol-5-yl)methyl]sulfanyl]phenyl]-1,2,3,4-tetrahydro-1benzazocine-5-carboxamide 497223-20-8P, 8-[4-(2-Butoxyethoxy) phenyl]-1-isobutyl-N-[4-[[(1-propyl-1H-imidazol-5yl)methyl]sulfanyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide 497223-34-4P, 8-[4-(2-Butoxyethoxy)phenyl]-1-propyl-N-[4-[(1propylimidazol-2-yl)methyl]sulfanyl]phenyl]-1,2,3,4-tetrahydro-1benzazocine-5-carboxamide 497223-53-7P, (-)-8-[4-(2-Butoxyethoxy) phenyl]-1-formyl-N-[4-[[(1-propylimidazol-5yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide 497223-54-8P, (-)-8-[4-(2-Butoxyethoxy)phenyl]-N-[4-[[(1propylimidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1benzazocine-5-carboxamide 497223-55-9P 497223-58-2P, Ethyl 4-[2-[[[4-[[[8-[4-(2-butoxyethoxy)phenyl]-1-isobutyl-1,2,3,4tetrahydro-1-benzazocine-5-yl]carbonyl]amino]phenyl]sulfanyl]methyl]imidaz ol-1-yl]butanoate 497223-64-0P, 8-[4-(2-Butoxyethoxy)phenyl]-1isobutyl-N-[4-[[(4-methyl-1-propylimidazol-5-yl)methyl]sulfanyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide 497223-67-3P, 8-[4-(2-Butoxyethoxy)phenyl]-1-isobutyl-N-[3-methyl-4-[[(1-propylimidazol-5-yl)methyl]sulfanyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5carboxamide 497223-70-8P, 8-[4-(2-Butoxyethoxy)phenyl]-1isobutyl-N-[3-methyl-4-[[(4-methyl-1-propylimidazol-5yl)methyl]sulfanyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide (methylamino)-4-oxobutyl]imidazol-2-yl]methyl]sulfanyl]phenyl]-1,2,3,4tetrahydro-1-benzazocine-5-carboxamide RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (drug candidate; preparation of benzazocinecarboxamides and related bicyclic compds. as CCR-5 antagonists for use against HIV infectious and other diseases) RN 497223-16-2 CAPLUS CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4tetrahydro-1-propyl-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]thio]phenyl]-(CA INDEX NAME)

$$N = N$$
 $N = N$
 $N =$

PAGE 2-A

/ n-∙Pr

RN 497223-20-8 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]thio]phenyl]- (9CI) (CA INDEX NAME)

$$N = N$$
 $N = N$
 $N =$

PAGE 2-A

/ i-Bu

RN 497223-34-4 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-propyl-N-[4-[[(1-propyl-1H-imidazol-2-yl)methyl]thio]phenyl]-(9CI) (CA INDEX NAME)

$$n-Pr$$
 N
 CH_2
 S
 NH
 $C=0$

PAGE 2-A / n-Pr

RN 497223-53-7 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1-formyl-1,2,3,4-tetrahydro-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

RN 497223-54-8 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

PAGE 1-B

RN 497223-55-9 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-[2-methyl-3-[(tetrahydro-2H-pyran-2-yl)oxy]propyl]-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

$$N = N$$
 $N = N$
 $N =$

PAGE 2-A

RN497223-58-2 CAPLUS 1H-Imidazole-1-butanoic acid, 2-[[[4-[[[8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-1-benzazocin-5-yl]carbonyl]amino]phenyl]thio]methyl]-, ethyl ester (9CI) (CA INDEX NAME) CN

PAGE 2-A

i-Bu

RN 497223-64-0 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[[(4-methyl-1-propyl-1H-imidazol-5-yl)methyl]thio]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} N = \\ N = \\$$

PAGE 2-A

i-Bu

RN 497223-67-3 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[3-methyl-4-[[(1-propyl-1H-imidazol-5-yl)methyl]thio]phenyl]- (9CI) (CA INDEX NAME)

$$N = N$$
 $N = N$
 $N =$

PAGE 2-A

./ i-Bu

RN 497223-70-8 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-N-[3-methyl-4-[[(4-methyl-1-propyl-1H-imidazol-5-yl)methyl]thio]phenyl]-1-(2-methylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} N \\ N \\ Pr-n \\ CH_2 \\ S \\ Me \\ NH \\ C \\ C \\ O \\ \end{array}$$

PAGE 2-A

/ i-Bu

RN 497223-90-2 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-N-[4-[[[1-[4-(methylamino)-4-oxobutyl]-1H-imidazol-2-yl]methyl]thio]phenyl]-1-(2-methylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & \\ \hline \\ MeNH-C-(CH_2)_3 & & \\ \hline \\ NH & \\ \hline \\ N-BuO-CH_2-CH_2-O & \\ \hline \\ N & \\ \hline \end{array}$$

PAGE 2-A / i-Bu

IT 497223-18-4P, 8-[4-(2-Butoxyethoxy)phenyl]-1-propyl-N-[4-[(1propylimidazol-5-yl)methyl]sulfonyl]phenyl]-1,2,3,4-tetrahydro-1benzazocine-5-carboxamide 497223-22-0P, 8-[4-(2-Butoxyethoxy)phenyl]-1-isobutyl-N-[4-[[(1-propyl-1H-imidazol-5yl)methyl]sulfonyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide 497223-27-5P, (-)-8-[4-(2-Butoxyethoxy)phenyl]-1-isobutyl-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1benzazocine-5-carboxamide oxalate 497223-28-6P, (S) - (-) - 8 - [4 - (2 - Butoxyethoxy)phenyl] - 1 - isobutyl - N - [4 - [[(1 - propyl - 1H - (2 - Butoxyethoxy)phenyl]] - 1 - isobutyl - N - [4 - [[(1 - propyl - 1H - (2 - Butoxyethoxy)phenyl]] - 1 - isobutyl - N - [4 - [[(1 - propyl - 1H - (2 - Butoxyethoxy)phenyl]] - 1 - isobutyl - N - [4 - [[(1 - propyl - 1H - (2 - Butoxyethoxy)phenyl]] - 1 - isobutyl - N - [4 - [[(1 - propyl - 1H - (2 - Butoxyethoxy)phenyl]] - 1 - isobutyl - N - [4 - [[(1 - propyl - 1H - (2 - Butoxyethoxy)phenyl]] - 1 - isobutyl - N - [4 - [[(1 - propyl - 1H - (2 - Butoxyethoxy)phenyl]] - 1 - isobutyl - N - [4 - [[(1 - propyl - 1H - (2 - Butoxyethoxy)phenyl]] - 1 - isobutyl - N - [4 - [[(1 - propyl - 1H - (2 - Butoxyethoxy)phenyl]] - 1 - isobutyl - N - [4 - [[(1 - propyl - 1H - (2 - Butoxyethoxy)phenyl]] - 1 - isobutyl - N - [4 - [[(1 - propyl - 1H - (2 - Butoxyethoxy)phenyl]] - 1 - isobutyl - N - [4 - [[(1 - propyl - 1H - (2 - Butoxyethoxy)phenyl]] - 1 - isobutyl - N - [4 - [[(1 - propyl - 1H - (2 - Butoxyethoxyeimidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5carboxamide methanesulfonate 497223-36-6P, (+)-8-[4-(2-Butoxyethoxy)phenyl]-1-propyl-N-[4-[[(1-propylimidazol-2yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide 497223-37-7P, (-)-8-[4-(2-Butoxyethoxy)phenyl]-1-propyl-N-[4-[(1-4-1)phenyl-1-phpropylimidazol-2-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1benzazocine-5-carboxamide 497223-41-3P, (-)-8-[4-(2-Butoxyethoxy) phenyl] -1-(2-methyl-2-propen-1-yl)-N-[4-[[(1-propylimidazol-5-propen-1-yl)]]yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide 497223-43-5P, (-)-8-[4-(2-Butoxyethoxy)phenyl]-1-isobutyl-9-methyl-N-[4-[[(1-propylimidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1benzazocine-5-carboxamide 497223-60-6P 497223-62-8P, yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide

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497223-65-1P, 8-[4-(2-Butoxyethoxy)phenyl]-1-isobutyl-N-[4-[[(4-
methyl-1-propylimidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-
benzazocine-5-carboxamide 497223-68-4P, 8-[4-(2-
Butoxyethoxy)phenyl]-1-isobutyl-N-[3-methyl-4-[[(1-propylimidazol-5-
yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide
497223-71-9P, 8-[4-(2-Butoxyethoxy)phenyl]-1-isobutyl-N-[3-methyl-
4-[[(4-methyl-1-propylimidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-
tetrahydro-1-benzazocine-5-carboxamide 497223-74-2P,
(S)-(-)-1-Isobuty1-8-[4-(2-propoxyethoxy)pheny1]-N-[4-[[(1-propy]-1H-
imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-
carboxamide 497223-76-4P, (S)-(-)-8-[4-(2-Propoxyethoxy)phenyl]-
1-propyl-N-[4-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-
tetrahydro-1-benzazocine-5-carboxamide 497223-77-5P,
(S) - (-) - 8 - [4 - (2 - Propoxyethoxy)phenyl] - 1 - propyl - N - [4 - [[(1 - propyl - 1H - [(1 - propyl - 1H - (2 - Propoxyethoxy)phenyl]]] - 1 - propyl - N - [4 - [((1 - propyl - 1H - (2 - Propoxyethoxy)phenyl]]] - 1 - propyl - N - [4 - [((1 - propyl - 1H - (2 - Propoxyethoxy)phenyl]]] - 1 - propyl - N - [4 - [((1 - propyl - 1H - (2 - Propoxyethoxy)phenyl]]]] - 1 - propyl - N - [4 - [((1 - propyl - 1H - (2 - Propoxyethoxy)phenyl]]]] - 1 - propyl - N - [4 - [((1 - propyl - 1H - (2 - Propoxyethoxy)phenyl]]]] - 1 - propyl - N - [4 - [((1 - propyl - 1H - (2 - Propoxyethoxy)phenyl]]]] - 1 - propyl - N - [4 - [((1 - propyl - 1H - (2 - Propoxyethoxy)phenyl]]]] - 1 - propyl - N - [4 - [((1 - propyl - 1H - (2 - Propoxyethoxy)phenyl]]]] - 1 - propyl - N - [4 - [((1 - propyl - 1H - (2 - Propoxyethoxy)phenyl]]]] - 1 - propyl - N - [4 - [((1 - propyl - (2 - Propoxyethoxy)phenyl]]]]] - 1 - propyl - N - [4 - [((1 - propyl - (2 - Propoxyethoxy)phenyl]]]]]]
imidazol-5-yl)methyl]sulfinyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-
carboxamide methanesulfonate 497223-89-9P, Ethyl
4-[2-[[4-[8-4-(2-butoxyethoxy)phenyl]-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahydro-1-isobutyl-1,2,3,4-tetrahy
benzazocine-5-yl]carbonyl]amino]phenyl]sulfinyl]methyl]imidazol-1-
yl]butanoate 497223-91-3P, (-)-8-[4-(2-Butoxyethoxy)phenyl]-1-
(cyclopropylmethyl)-N-[4-[[(1-propylimidazol-5-yl)methyl]sulfinyl]phenyl]-
1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide 497223-92-4P
497223-93-5P 497250-40-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (drug candidate; preparation of benzazocinecarboxamides and related bicyclic
        compds. as CCR-5 antagonists for use against HIV infectious and other
        diseases)
497223-18-4 CAPLUS
1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-
tetrahydro-1-propyl-N-[4-[[(1-propyl-1H-imidazol-5-
yl)methyl]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)
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RN

CN

PAGE 2-A

n-Pr

RN 497223-22-0 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

$$N = N$$
 $N = N$
 $N =$

PAGE 2-A / i-Bu

RN 497223-27-5 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 497223-25-3 CMF C41 H52 N4 O4 S

PAGE 1-B

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 497223-28-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 497223-25-3 CMF C41 H52 N4 O4 S

PAGE 1-B

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 497223-36-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-propyl-N-[4-[[(1-propyl-1H-imidazol-2-yl)methyl]sulfinyl]phenyl]-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

PAGE 1-B

RN 497223-37-7 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-propyl-N-[4-[[(1-propyl-1H-imidazol-2-yl)methyl]sulfinyl]phenyl]-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

PAGE 1-B

RN 497223-41-3 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methyl-2-propenyl)-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

CH₂

PAGE 1-B

RN 497223-43-5 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-9-methyl-1-(2-methylpropyl)-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

PAGE 1-B

RN 497223-60-6 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-[(1-methyl-1H-pyrazol-4-yl)methyl]-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-B

RN 497223-62-8 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-phenyl-N-[4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

$$N = N$$
 $N = N$
 $N =$

PAGE 2-A

Ph

RN 497223-65-1 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[[(4-methyl-1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

$$N = N$$
 $N = N$
 $N =$

PAGE 2-A

/ i-Bu

RN 497223-68-4 CAPLUS

CN

1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[3-methyl-4-[[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} N = \\ N = \\$$

PAGE 2-A

i-Bu

RN 497223-71-9 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-N-[3-methyl-4-[[(4-methyl-1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-1-(2-methylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} N = \\ N = \\$$

PAGE 2-A

i-Bu

RN 497223-74-2 CAPLUS

CN 1-Benzazocine-5-carboxamide, 1,2,3,4-tetrahydro-1-(2-methylpropyl)-8-[4-(2-propoxyethoxy)phenyl]-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A

RN 497223-76-4 CAPLUS

CN 1-Benzazocine-5-carboxamide, 1,2,3,4-tetrahydro-8-[4-(2-propoxyethoxy)phenyl]-1-propyl-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

n-Pr

PAGE 1-B

PAGE 1-A

RN 497223-77-5 CAPLUS

CN 1-Benzazocine-5-carboxamide, 1,2,3,4-tetrahydro-8-[4-(2-propoxyethoxy)phenyl]-1-propyl-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 497223-76-4 CMF C39 H48 N4 O4 S

Absolute stereochemistry. Rotation (-).

PAGE 1-B

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 497223-89-9 CAPLUS

CN 1H-Imidazole-1-butanoic acid, 2-[[[4-[[[8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-1-benzazocin-5-yl]carbonyl]amino]phenyl]sulfinyl]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ EtO-C-(CH_2)_3 \\ \hline \\ NH \\ C=O \\ \hline \\ N-BuO-CH_2-CH_2-O \\ \hline \\ N \\ \hline \\ N \\ \end{array}$$

PAGE 2-A

i-Bu

RN 497223-91-3 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1(cyclopropylmethyl)-1,2,3,4-tetrahydro-N-[4-[[(1-propyl-1H-imidazol-5yl)methyl]sulfinyl]phenyl]-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

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RN 497223-92-4 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-[(2R)-3-hydroxy-2-methylpropyl]-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

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RN 497223-93-5 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-[(2R)-3-hydroxy-2-methylpropyl]-N-[4-[(R)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-B

RN 497250-40-5 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-propyl-N-[4-[(S)-[(1-propyl-1H-imidazol-5-yl)methyl]sulfinyl]phenyl]-, monomethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 497250-39-2 CMF C40 H50 N4 O4 S

Absolute stereochemistry. Rotation (-).

CM 2

CRN 75-75-2 CMF C H4 O3 S

IT 497223-30-0, 8-[4-(2-Butoxyethoxy)phenyl]-1-isobutyl-N-[4-[[(1-propylimidazol-2-yl)methyl]sulfanyl]phenyl]-1,2,3,4-tetrahydro-1-benzazocine-5-carboxamide

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of benzazocinecarboxamides and related bicyclic compds. as CCR-5 antagonists for use against HIV infectious and other diseases)

RN 497223-30-0 CAPLUS

CN 1-Benzazocine-5-carboxamide, 8-[4-(2-butoxyethoxy)phenyl]-1,2,3,4-tetrahydro-1-(2-methylpropyl)-N-[4-[[(1-propyl-1H-imidazol-2-yl)methyl]thio]phenyl]- (9CI) (CA INDEX NAME)

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i-Bu

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT